

# **ABSTRACT OF THE DISCLOSURE**

5 The invention relates to a method of preparation for polymers, particularly binders for powder coatings and powder coatings which are prepared as a solution in a supercritical fluid phase. Binders for powder coatings are prepared from at least two ethylenically unsaturated monomers capable of free-radical or ionic copolymerisation, and conventional initiators and regulators in supercritical fluids, whereby polymerisation is carried out in the homogeneous phase, and, after the reaction has ended, either the composition or the phase parameters of the mixture are altered so that at least two phases with supercritical fluid are obtained, and the phase containing predominantly polymer is separated and the polymer is separated as a powder from the sc fluid by depressurisation or the polymer phase is further processed under supercritical phase conditions to the powder coating.